

Abstract for delta smelt team:

The Delta Smelt Team concluded that Alternative 3 has the most potential to improve conditions for delta smelt; however, the uncertainty associated with this evaluation is extremely high. The Team reached this conclusion after a qualitative assessment of existing data on delta smelt biology and consideration of model runs based on specific configurations and operational criteria for the different Alternatives. Although the Team had consensus on a number of assumptions regarding delta smelt biology, opinions of other scientists on the validity of the assumptions will likely vary from consensus to strong disagreement. The outcome of the assessment is very dependent on these assumptions. The Team did separate assessments for wet and dry years, because delta smelt distribution is sensitive to hydrologic conditions. The Alternatives were assessed in comparison to existing conditions. Existing conditions in wet years can be characterized as moderately poor and in dry years as very poor. The No Action Alternative results in a slight worsening of conditions in both year types because of increased diversions to meet increased demand. The Common Programs result in a moderate improvement in conditions in both year types because of hypothesized benefits associated with increases in shallow-water habitat. Alternatives 1 and 2 represented moderate improvements compared to existing conditions but the benefits are derived from the Common Programs rather than changes in conveyance associated with the alternatives. Alternative 1 resulted in a slight decline in value of the Common Programs. Alternative 2 resulted in a moderate decline in the value of the Common Programs. The hydrodynamic effects of Alternative 2 were believed to be a strong negative effect on delta smelt. Alternative 3 resulted in significant benefit to delta smelt because of the combination of the positive effects of the Common Programs and the Team's assessment that the hydrodynamic effects would also be positive for the majority of the population. The degree of benefit from the three Alternatives is very dependent on the Common Programs; thus, different assumptions about benefits of the Common Programs could result in substantially different assessments.